

ABSTRACT

The present invention provides a method for forming a metal line of a semiconductor device comprising the steps of: forming a via plug on a semiconductor substrate; forming an interlayer insulating film on the 5 semiconductor substrate, on which the via plug is formed; forming a trench by patterning the interlayer insulating film in order to form an upper line to be connected to the via plug; depositing a spacer insulating film, which is more invulnerable to a mechanical stress than the interlayer insulating film, on the semiconductor substrate on which the trench is formed; forming a spacer on a 10 side wall of the trench by performing an anisotropic-dry-etching of the spacer insulating film; and forming a metal line by burying the trench with a conductive material.